ABSTRACT

[Subject matter] The present invention presents a cationic polymer. When a hair treatment composition containing the cationic polymer is used to damaged hair, excellent conditioning effects are shown. When a skin cosmetic treatment composition containing the cationic polymer, foam formation and foam quality are improved and good use feeling is obtained.

[Means to solve problem] The present inventions relates to cation-modified purified galactomannan polysaccharides prepared by purifiying a crude galactomannan polysaccharide obtained from albumens of seeds which comprises a main chain composed of mannose units and a side chain composed of galactose units and has mannose to galactose ratio of 4:1 and/or 3:1 to produce purified galactomannan polysaccharide in which the galactomannan content is 80 wt%, and partially substituting hydroxyl groups of the purified galactomannan polysaccharide with a quaternary nitrogen-containing group of Formula (1), wherein a cation charge density derived from the quaternary nitrogen-containing group can be obtained in a specific range, and cosmetic composition containing the same.

Chemical formula (1)

$$--O - + R_4O + R_2O + R_2O + R_3 \cdot X^-$$

$$OH R_2$$

(where R_1 and R_2 each independently represent an alkyl group having 1 to 3 carbon atoms; R_3 represents an alkyl group having 1 to 24 carbon atoms; X-represents an anion; n is either 0 or 1 to 30; and, when n is 1 to 30, $(R_4O)_n$ represents a polymer residue of an alkylene oxide having 2 to 4 carbon atoms and forms a polyalkylene glycol chain composed of a single alkylene oxide and/or a polyalkylene glycol chain composed of two or more types of alkylene oxide). [Drawing to be selecte] Non.